

RD-A168 409

THE AIR FORCE EXECUTIVE'S GUIDE ON STRESS: THE CAUSES
CONSEQUENCES AND COPING STRATEGIES (U) AIR COMMAND AND
STAFF COLL MAXWELL AFB AL T J MCDONALD APR 86

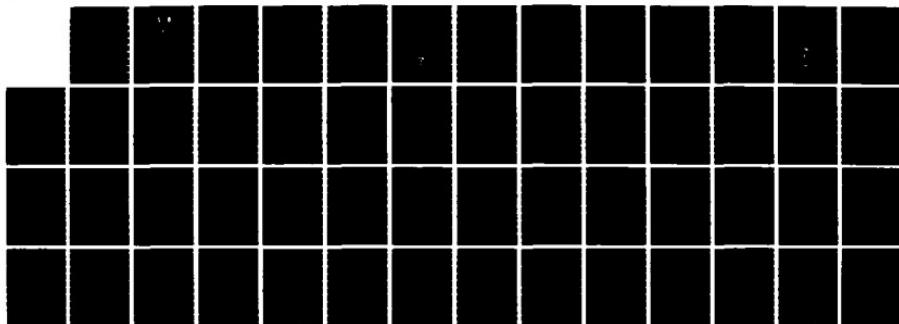
1/1

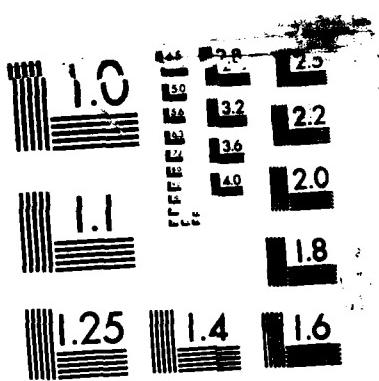
UNCLASSIFIED

ACSC-86-1670

F/G 5/10

NL





MICROCOPY RESOLUTION TEST CHART
NATIONAL BUREAU OF STANDARDS 1951

(2)

AD-A168 409

DTIC
SELECTED
JUN 13 1986
S D

D



AIR COMMAND
AND
STAFF COLLEGE



STUDENT REPORT

THE AIR FORCE EXECUTIVE'S GUIDE ON STRESS;
THE CAUSES, CONSEQUENCES, AND
COPING STRATEGIES

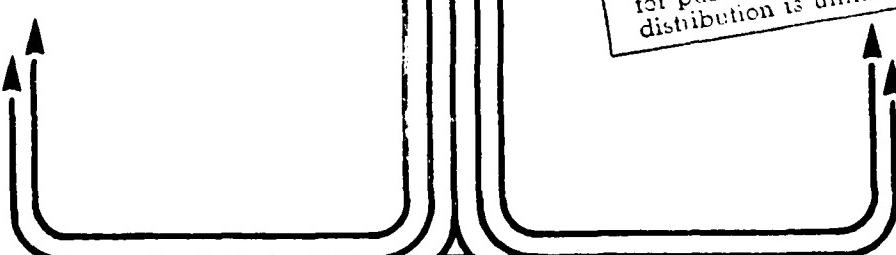
Major Thomas J. McDonald

Series I

"insights into tomorrow"

This document has been approved
for public release and sale; its
distribution is unlimited.

FILE COPY



ee 6 12 045

DISCLAIMER

The views and conclusions expressed in this document are those of the author. They are not intended and should not be thought to represent official ideas, attitudes, or policies of any agency of the United States Government. The author has not had special access to official information or ideas and has employed only open-source material available to any writer on this subject.

This document is the property of the United States Government. It is available for distribution to the general public. A loan copy of the document may be obtained from the Air University Interlibrary Loan Service (AUL/LDEX, Maxwell AFB, Alabama, 36112) or the Defense Technical Information Center. Request must include the author's name and complete title of the study.

This document may be reproduced for use in other research reports or educational pursuits contingent upon the following stipulations:

-- Reproduction rights do not extend to any copyrighted material that may be contained in the research report.

-- All reproduced copies must contain the following credit line: "Reprinted by permission of the Air Command and Staff College."

-- All reproduced copies must contain the name(s) of the report's author(s).

-- If format modification is necessary to better serve the user's needs, adjustments may be made to this report--this authorization does not extend to copyrighted information or material. The following statement must accompany the modified document: "Adapted from Air Command and Staff Research Report
(number) entitled (title) by
(author) ."

-- This notice must be included with any reproduced or adapted portions of this document.



REPORT NUMBER 86-1670

TITLE THE AIR FORCE EXECUTIVE'S GUIDE ON STRESS
THE CAUSES, CONSEQUENCES, AND COPING STRATEGIES

AUTHOR(S) MAJOR THOMAS J. McDONALD

FACULTY ADVISOR MAJOR STEPHEN P. BOYER, ACSC/EDCC

SPONSOR LT COLONEL ROBERT F. FOWLER, AWC/EDRL

Submitted to the faculty in partial fulfillment of
requirements for graduation.

AIR COMMAND AND STAFF COLLEGE
AIR UNIVERSITY
MAXWELL AFB, AL 36112

UNCLASSIFIED

SECURITY CLASSIFICATION OF THIS PAGE

REPORT DOCUMENTATION PAGE

1a. REPORT SECURITY CLASSIFICATION UNCLASSIFIED		1b. RESTRICTIVE MARKINGS	
2a. SECURITY CLASSIFICATION AUTHORITY		3. DISTRIBUTION/AVAILABILITY OF REPORT STATEMENT "A" Approved for public release; Distribution is unlimited.	
2b. DECLASSIFICATION/DOWNGRADING SCHEDULE			
4. PERFORMING ORGANIZATION REPORT NUMBER(S) 86-1670		5. MONITORING ORGANIZATION REPORT NUMBER(S)	
6a. NAME OF PERFORMING ORGANIZATION ACSC/EDCC	6b. OFFICE SYMBOL (If applicable)	7a. NAME OF MONITORING ORGANIZATION	
6c. ADDRESS (City, State and ZIP Code) Maxwell AFB, AL 36112-5542		7b. ADDRESS (City, State and ZIP Code)	
8a. NAME OF FUNDING/SPONSORING ORGANIZATION	8b. OFFICE SYMBOL (If applicable)	9. PROCUREMENT INSTRUMENT IDENTIFICATION NUMBER	
8c. ADDRESS (City, State and ZIP Code)		10. SOURCE OF FUNDING NOS.	
		PROGRAM ELEMENT NO.	PROJECT NO.
		TASK NO.	WORK UNIT NO.
11. TITLE (Include Security Classification) The Air Force Executive's Guide on Stress			
12. PERSONAL AUTHOR(S) McDonald, Thomas J., Major			
13a. TYPE OF REPORT	13b. TIME COVERED FROM _____ TO _____	14. DATE OF REPORT (Yr. Mo. Day) April 1986	15. PAGE COUNT 52
16. SUPPLEMENTARY NOTATION Item 11: The Causes, Consequences, and Coping Strategies			
17. COSATI CODES		18. SUBJECT TERMS (Continue on reverse if necessary and identify by block number)	
FIELD	GROUP		
19. ABSTRACT (Continue on reverse if necessary and identify by block number) This is a nine chapter handbook designed to enable officers and senior NCOs to better cope with stress. Stress, its causes, and its consequences are described in the first four chapters. The remaining chapters explain important methods of coping with stress. Nutrition, exercise, relaxation, stressor management, and personal strategies, are the methods described. Both the importance of and the implementing procedures for these methods are described.			
20. DISTRIBUTION AVAILABILITY OF ABSTRACT UNCLASSIFIED/UNLIMITED <input type="checkbox"/> SAME AS RPT. <input checked="" type="checkbox"/> XOTIC USERS <input type="checkbox"/>		21. ABSTRACT SECURITY CLASSIFICATION UNCLASSIFIED	
22a. NAME OF RESPONSIBLE INDIVIDUAL ACSC/EDCC Maxwell AFB, AL 36112-5542		22b. TELEPHONE NUMBER (Include Area Code) (205) 293-2483	22c. OFFICE SYMBOL

THE AIR FORCE EXECUTIVE'S GUIDE
ON STRESS

THE CAUSES,
CONSEQUENCES,
AND COPING STRATEGIES:

A PROGRAM FOR IMPROVING HEALTH



TABLE OF CONTENTS

List of Illustrations.....	iv
About the Author.....	v
Preface.....	vi
Part I: STRESS, ITS CONSEQUENCES, AND ITS CAUSES.....	1
Chapter One: Stress Defined.....	2
Chapter Two: The Response to Stress and the Consequences.....	5
The Stress Response.....	5
The Consequences.....	5
Chapter Three: The Sources of Stress--Work Related Stressors.....	8
Stressors.....	8
The Executive as a Source of Stress.....	9
Chapter Four: Stress and Personal Characteristics.....	11
Cognitive Factors.....	11
Demographic Factors.....	12
PART II: COPING WITH STRESS.....	13
Chapter Five: Nutrition and Stress.....	14
Improper Dietary Habits and Stress.....	14
Stress and Dietary Nutrients.....	15
The Proper Diet.....	16
Chapter Six: Stress and Exercise.....	18
Why Exercise?.....	18
Aerobic Exercise Programs.....	19
Establishing an Exercise Program.....	19
Avoiding Injury.....	20
Aerobic Exercises.....	21
Indoor Exercises.....	23
Chapter Seven: Relaxation.....	24
Why Relax?.....	24
Relaxing Exercises,.....	24
Mental Relaxation.....	25
Chapter Eight: Stressor Management.....	26
Dealing with Stressors.....	26
Develop a Support Team.....	26
Reduce Demand.....	27
Time Management.....	28
Dealing with the Stress Producing Executive.....	30

Chapter Nine: Personal Strategies.....	32
Self-Awareness.....	32
Monitoring Your Heart.....	32
Changing Type A Behavior.....	35
The Hardy Executive--Commitment, Control, Challenge.....	36
Forming a Plan.....	37
Bibliography.....	38
Index.....	42

Accesion For	
NTIS CRA&I	<input checked="" type="checkbox"/>
DTIC TAB	<input type="checkbox"/>
Unannounced	<input type="checkbox"/>
Justification	
By _____	
Distribution / _____	
Availability Codes	
Dist	Avail and/or Special
A-1	



LIST OF ILLUSTRATIONS

TABLES

TABLE 1--Signs of Stress.....	7
TABLE 2--Target Heart Rates.....	21
TABLE 3--Gauging Heart Disease Risk.....	33
TABLE 4--Your Healthiest Weight Range.....	34
TABLE 5--Ratio Ranges and Heart Disease Risk Category.....	35

FIGURES

FIGURE 1--Model of Work Stress.....	3
FIGURE 2--Performance/Health versus Stress.....	4

ABOUT THE AUTHOR

Major Thomas J. McDonald, son of SMSgt and Mrs. Joseph E. McDonald, was born at Biggs Air Base, Texas, on 3 Dec 1951. In June 1973, he received both a Bachelor of Science degree in Civil Engineering and an Air Force ROTC commission from the Ohio State University. He has since been assigned to Base Civil Engineering officer positions at Scott AFB, Illinois; Izmir, Turkey; and Sembach AB, Germany. He has also worked on the HQ USAFE Inspector General and HQ PACAF Engineering staffs. Between these latter two assignments, he received a Master of Science degree in Engineering Management from the Air Force Institute of Technology (AFIT).

At AFIT, Major McDonald worked with the Behavioral Sciences Department in conducting a major research effort on stress and heart disease. His master's thesis, "An Assessment of the Relationship Between the Coronary-Prone (Type A) Behavior Pattern, Stress, and Coronary Heart Disease," was highly praised and received AFIT's "Pride in Excellence" award.

Major McDonald is well qualified for writing the chapter on exercise. He has a broad athletic background and has attempted each of the exercises described in this handbook. He began running in high school and during his senior year ran a sub-five minute mile. While at Ohio State, he lettered in volleyball playing for Doug Beal, the US Olympic volleyball team captain and coach. Major McDonald has twice played in the US Volleyball Association National Championships, is a four-time USAFE all-star, and has once been named a PACAF all-star in volleyball.

PREFACE

Every executive faces stress at work. In proper amounts, stress helps executives attain peak performance. However, in a high pressure, time constrained environment, stress can become excessive and counterproductive symptoms are experienced. In fact, stress in the work place might be the greatest cause of illness in the United States. (37:65) It has been linked with ulcers, hypertension, and the number one killer in America, coronary heart disease. Even when illness is avoided, harmful stress reduces productivity and degrades performance. Hence, the consequences of stress harm the executive and detract from organizational effectiveness.

Managing stress is especially important for Air Force executives because of the link between stress and heart disease. Forty is the most common age for heart attacks in the Air Force, and the incidence of heart attack increases dramatically for members between the ages of 32 and 42. Evidence indicates that this problem may be related to psychological stress. (46:43-44)

Fortunately, effective methods of solving stress-related problems are available. The purpose of this handbook is to enable Air Force executives, officers and senior NCOs, to use these methods. The approach is twofold:

In Part I, the handbook familiarizes you with stress, its consequences, and its causes. Chapter One defines stress, setting a foundation for further discussion. Chapter Two describes the stress response and its relationship with illness. Chapters Three and Four provide information on the causes of stress: work-related stressors and personal characteristics, respectively. By increasing your understanding of stress, you will be able to determine whether you are being affected by stress.

Part II deals with managing stress, and important coping methods are identified and explained. Nutrition, exercise, relaxation, stressor management, and personal strategies are discussed in Chapters Five through Nine, respectively. In explaining the methods, both their importance and implementing procedures are described.

Hopefully, by knowing the severity of stress-related problems and some means of overcoming those problems, you will be motivated to develop and implement an appropriate strategy, if needed. So, you can start now by learning to control stress, or you can let it control you and risk becoming a casualty.

PART I

STRESS, ITS CONSEQUENCES, AND ITS CAUSES



Chapter One

STRESS DEFINED

Exactly what is stress? Since many different definitions of stress have been proposed, it is important that a common understanding be reached. The definition used here applies to work-related stress and is used as a basis of discussion throughout the handbook.

Definition. Stress is a response to a situation, condition, or event which places special physical or psychological demands on a person. The response is mediated by individual characteristics (either cognitive or demographic). (12:6)

The situations, conditions, or events which influence demands are called stressors. Almost any work-related factor which is viewed as harmful can lead to stress. (2:470)

Individual characteristics shape a person's perception of a stressor. These characteristics also moderate the impact of the stress response. (21:349)

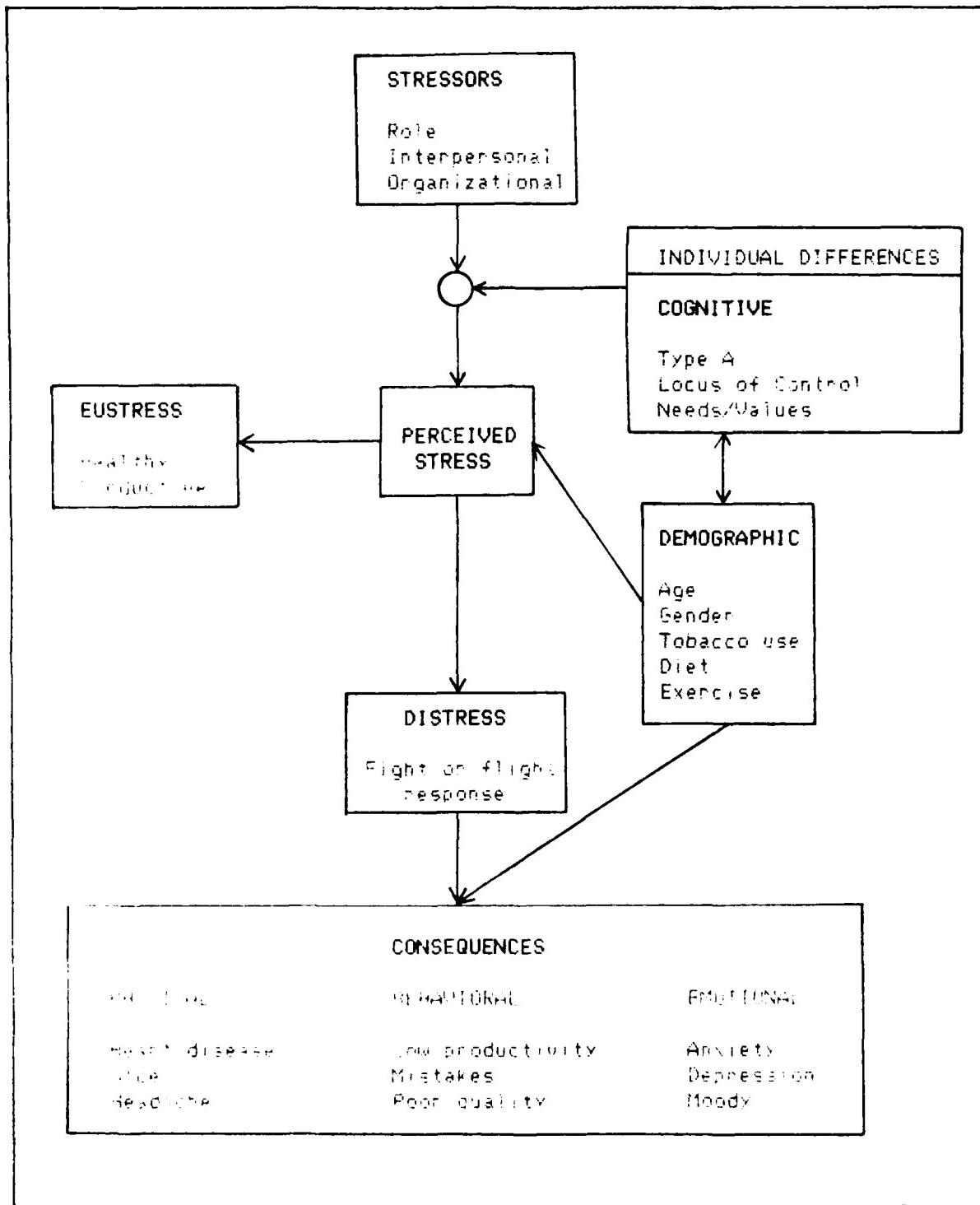
Hence, stress is neither a product of the individual nor the environment alone but results from the interaction of the two. (12:42-43)

Stress and its effects are cumulative, the sum of self-imposed and external demands. (46:48)

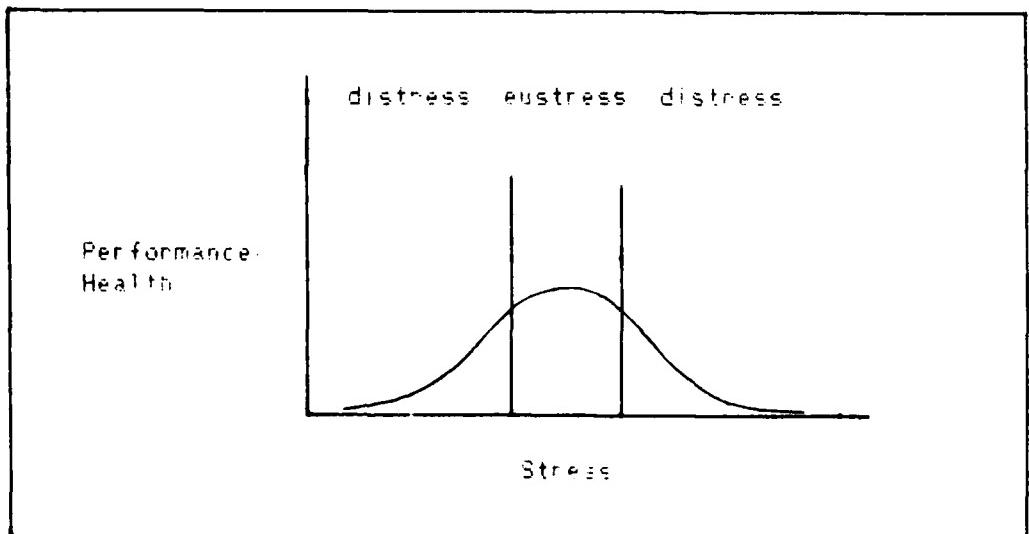
For the executive, therefore, the perception of a work-related stressor engages the stress response which over time leads to a variety of consequences. A model which illustrates this definition is shown in Figure 1.

Eustress. Although this definition infers a negative connotation, stress is both beneficial and harmful. Each person has an optimum stress range as shown in Figure 2. The proper amount of stress, called eustress, motivates the executive to healthy productivity. (47:3-63) This occurs when the executive views a demand as something he/she can cope with, and he/she responds to meet the challenge. Eustress leads to improved health and performance. Unfortunately, the executive is often unable to regulate the amount of stress he/she experiences and distress results.

Distress. Distress occurs when the executive is either under-stressed or over-stressed. When under-stressed the executive faces too little demand. As a result, he/she is likely to feel non-productive, bored, frustrated, or unfulfilled. There is no motivation to perform a job well. (47:3-63) When over-stressed, the executive views demands as harmful, a threat, or with uncertainty. In either case, distress erodes both performance and health.



Model of Work Stress
Figure 1



Performance/Health versus Stress [7-12]
Figure 2

The remainder of this handbook will focus on distress, which is synonymous with referring to it simply by the term "stress."

Chapter Two

THE RESPONSE TO STRESS AND THE CONSEQUENCES

This chapter describes the body's response to and the consequences of stress. The intention is to show cause and effect by explaining how the stress response is related to physiological, emotional, behavioral, and organizational problems.

THE STRESS RESPONSE

The body responds to cope with a perceived threat regardless of the source of stress. This is an involuntary response known as the "fight or flight" syndrome. Initially, "stress hormones" such as adrenalin, cortisol, insulin, and aldosterone are released to prepare the body for physical and mental action. (27:2) These hormones trigger a number of reactions. Energy (sugar) stored in muscle, liver, and fat is converted into readily usable energy which is circulated through the bloodstream. The metabolism increases to distribute energy and oxygen to brain, limbs, and organs. (39:64) Consequently, the arteries constrict while blood pressure, heart rate, and respiration increase. To accommodate the flow of blood to large skeletal muscles, blood flow to the skin and gastrointestinal tract is decreased. (27:2) Concurrently, unessential body functions cease. The digestive system shuts down, and longer term processes such as growth, healing, and disease surveillance are postponed. (39:64) Together, these reactions are designed to get the body through an acute crisis by preparing it for physical action.

This response, however, is a poor way for today's executive to deal with stress. (39:64) If stress is chronic, the body will continually respond in a physical way to perceived threats. Unfortunately, the executive exposed to a perceived stress might not have the opportunity to physically respond to a stressor. Neither hitting a troublesome boss nor running away are appropriate methods for dealing with problem situations. Without a physical outlet, a chronic stress response can promote additional physiological reactions. Initially, the body will resist these reactions. Over time, however, the body's resistance will break down causing a person to suffer as described in the following section. (27:2)

THE CONSEQUENCES

Physical Illness. The illnesses related to a chronic stress response are varied and significant.

A frequent stress response depletes the body of stored energy causing muscle deterioration and fatigue. (39:64) These muscle problems can cause tension headaches, back pains, or joint pains. (27:3)

After the digestive system is suppressed for prolonged periods--heart-burn, diarrhea, and stomach ulcers can result. (39:64)

With disease surveillance suppressed, there is greater susceptibility to illness. Illnesses whose course can be influenced include diabetes, skin disorders, and some cancers. (35:26)

Most critical is the impact on the cardiovascular system. The increased blood pressure reaction leads to hypertension. Further, sodium is retained exacerbating this problem. (39:64) More significantly, one of the byproducts of cortisol is cholesterol, a major cause of coronary heart disease. (46:45-46) Business research strongly supports this notion, showing a consistent relationship between work-related stressors, and cholesterol and heart disease.

For reasons such as these, stress is considered a major cause of disease and illness.

Emotional and Behavioral Impact. Besides physiological reactions, chronic stress affects the executive psychologically and behaviorally. This occurs largely because of a chemical imbalance caused by the stress hormones. As a result, the distressed executive will encounter anxiety, depression, or lowered self-esteem. He/she will also tend to become irritable, and interpersonal relationships will become strained. The executive then becomes inefficient, loses objectivity, has a greater tendency to make mistakes, suffers memory lapses, and feels mentally fatigued. (46:47) Individually or collectively these outcomes detract from productivity and performance.

Organizational Impact. The organization also suffers when executives are distressed. Reduced performance and productivity obviously decrease organizational effectiveness. Other adverse outcomes include absenteeism, job dissatisfaction, higher accident rates, and poorer organizational climate. (38:37)

The stress response manifests a wide variety of consequences and exacts a heavy toll from both the individual and the organization. The consequences range from a simple headache to lowered organizational effectiveness to heart disease and death. Some of the danger signals an executive might experience are summarized in Table 1. Review the table and determine whether you are experiencing any of the signs on a recurring basis. If so, you need to implement an appropriate coping strategy and perhaps seek professional help.

<u>Physical Signs</u>	<u>Behavioral Signs</u>	<u>Emotional Signs</u>
Muscle tension/headaches Change in appetite, craving sweets Difficulty sleeping Restless Cold hands & feet Elevated pulse Higher blood pressure Diarrhea Backaches, joint pain Fatigue Illness	Lower productivity, motivation, efficiency Poor work or decision quality More mistakes, conflict Job dissatisfaction Absenteeism Indecision Forgetfulness Accidents	Anxiety Depression Moody Hostile Self-doubt Lower self-esteem Irritable Apathetic Withdrawal Worrisome

SIGNS OF STRESS (Adapted from 13:24)

Table 1

Chapter Three

THE SOURCES OF STRESS--WORK RELATED STRESSORS

This chapter is divided into two major sections. The first section discusses stressors normally found in the work place. The second section discusses the executive as a source of stress.

STRESSORS

The work place often fosters the situation, condition, or event--stressors--which cause harmful demands. The purpose of this section is to familiarize you with some of the work-related stressors which afflict executives. By recognizing the likely sources of stress, you will be better able to deal with them. These stressors are grouped into two broad categories called role and interpersonal/organizational.

Role Stressors. The major role stressors--work overload, time pressures, role conflict, and role ambiguity--have been associated with both physical and psychological problems.

Work overload includes both quantitative and qualitative overload. Quantitative overload is the extent to which there is too much work to perform in too little time. Qualitative overload is the degree to which job requirements exceed abilities or skills. (22:165)

Time pressures are the extent to which unreasonable deadlines and time demands are imposed. They are a frequent source of overload for executives, especially those concerned with quality. (22:165)

Role conflict exists when an individual is torn by contradictory demands or an unclear chain of command. (22:165) It also occurs when the organization's expectations concerning behavior differ from the individual's expectations. (44:70)

Role ambiguity occurs when an individual lacks information about his/her job or performance standards. The person experiences uncertainty about requirements and expectations due to this lack of information. (1:49)

Interpersonal/Organizational Stressors. Interpersonal and organizational stressors include responsibility for others, job pressures, poor interpersonal relations, and organizational climate.

Responsibility for others is a major source of stress. Since executives are dependent on others to attain results, they often perceive a lack of control. Further, high level responsibilities require frequent interactions and attending many meetings. Interactions can lead to conflict and meetings are sometimes viewed as nonproductive. Time pressures are also associated

with responsibility when the executive needs to attain results promptly. (1:63-64)

Job pressures include a combination of workload, responsibility, and conflict, coupled with a need to attain results. Executives under pressure experience feelings that they lack power and influence, or that they are performing below their ability. As a result, they feel helpless and that they lack control. (19:19-20)

Poor interpersonal relations result when people have problems relating to or working with others. (44:70) It can be generated by conflict or inadequate communications between people and is likely to occur where ambiguity is present. (7:571)

Organizational climate consists of many factors such as controls, rules, and the degree of participative decision making. When controls are tight, rules are overly restrictive, or autonomy is lacking, executives sense dissatisfaction with the job. (7:571)

Stressors arise from many sources and can work independently or collectively. Research has shown the above stressors, if experienced in excess, are harmful to the executive physically and psychologically. (38:36-37)

Of course, you can encounter many other stressors in the Air Force. Some include unsafe working conditions, poor working conditions, insufficient reward, shift work, promotion uncertainty, TDY, remote tours, and PCS transfers.

Although stressors affect everyone in an organization, research suggests that executives face more stressful situations than the remainder of the work force. (47:3-65) At the higher levels of responsibility stressors are often interrelated, thus increasing problems for the executive. French and Caplan, two distinguished behavioral scientists, concluded that executives are far more likely to develop heart disease because they experience different types of organizational stress more frequently than others. (1:73)

THE EXECUTIVE AS A SOURCE OF STRESS

The executive is often a source of stress for others, especially subordinates. As leaders, executives must motivate subordinates to perform, and naturally stress is induced. As you know, certain stress levels are healthy. It is when the executive makes excessive or improper demands that subordinates feel distress.

Here are some ways executives induce stress:

By being overly authoritarian. Although it is sometimes appropriate, an authoritarian approach is a rigid leadership style which restricts the subordinates' freedom in decision making and taking action. Even though people vary in skills and experience, authoritarian executives tend to treat everyone the same. For competent employees, authoritarian leadership is highly

frustrating. Consequently, this style nurtures anger, hostility, and stress. (35:30)

Withhold information. Withholding information creates ambiguity and uncertainty. Subordinates need clear and timely information to perform, and they need to know where they stand with the boss. (5:61) Performance and performance evaluation are key to success and promotion for subordinates. Uncertainty pertaining to these areas easily leads to stress.

Expect perfection. Some executives never allow others to make a mistake. This is an impossible standard which takes a toll on employees.

Make excessive demands. Sometimes an executive does not know the extent of the work they require. Some tasks are too difficult or time consuming to be performed in the required schedule. Overload is the result.

Levy suspenses. Suspended tasks impact employees several ways. Suspenses can add to time pressures and create overload. In addition, they interfere with the employees' work schedule. The suspended task may be relatively less important than other tasks, creating a disparity between what must be done and what should be done.

Executives make a tremendous impact on the degree of stress felt by others. They can reduce both emotional and physiological well-being. This problem has been identified to prevent you from distressing others.

Chapter Four

STRESS AND PERSONAL CHARACTERISTICS

As indicated in the stress model, individual characteristics shape the perception of the stressor and moderate its impact. Cognitive differences explain why situations are perceived as stressful by some individuals but nonstressful by others. Demographic factors influence the degree to which stress is felt. Both cognitive and demographic factors are described in this chapter.

COGNITIVE FACTORS

Cognitive factors shape a person's perception of and response to stress.

Type A Behavior. Type A behavior describes a life style--a way of responding to events. "It is characterized by extremes of competitiveness, striving for achievement, explosive speech, aggressiveness, haste, impatience, and feelings of time pressures and responsibility challenges." (23:9) Factor analysis of the construct reveals the following major dimensions of Type A behavior: speed/impatience, job involvement, and hard driving/competitive. Type A persons are so committed to their professions they neglect other aspects of their lives. A number of major studies have linked Type A behavior with coronary heart disease. Hence, it is known as the coronary-prone behavior pattern. (23:2)

Some signs of Type A behavior are as follows: fist clenching during conversation, frequent use of obscenities, desire to compete and win at all costs, fixed opinions, facial and body tension, rapid speech, rapid blinking, head-nodding while speaking, rapid body movements, difficulty in sitting and doing nothing, intense dislike of waiting, rapid pace of activities, fast eating, and polyphasic (more than one at a time) thoughts and actions. Type A persons do not show all of these behaviors. Most exhibit four to six of the signs. (11:56-59)

Locus of Control. Locus of control has two extremes: internal and external. Individuals with an internal locus of control believe that reinforcements and reward are contingent on their own behavior, traits, or abilities. People with an external locus have less faith in their abilities and behavior. They believe rewards and reinforcements are controlled by outside forces such as luck, fate, powerful persons, or the organizational system. Research shows a relationship between an external locus of control and stress. (23:38-39)

Needs and Values. Individual needs and values establish desires and influence the perceptions of demands. Each person has many needs and values. Some values associated with stress are perfectionism, high performance standards, and ambition. Need for achievement, clarity, feedback, recognition, reward, acceptance, responsibility, and certainty influence a person's perception of

stressors. Being aware of your needs and values is important to understanding some of the causes of stress. (40:192-193)

Abilities and Experience. Abilities and experience help shape the perception of a stressor and the uncertainties which result. For example, past experiences and training can enable an individual to deal effectively with a given situation or condition. Uncertainty can be reduced or eliminated by being able to select the proper course of action. Accordingly, abilities and experience moderate the stress response. (40:194)

DEMOGRAPHIC FACTORS

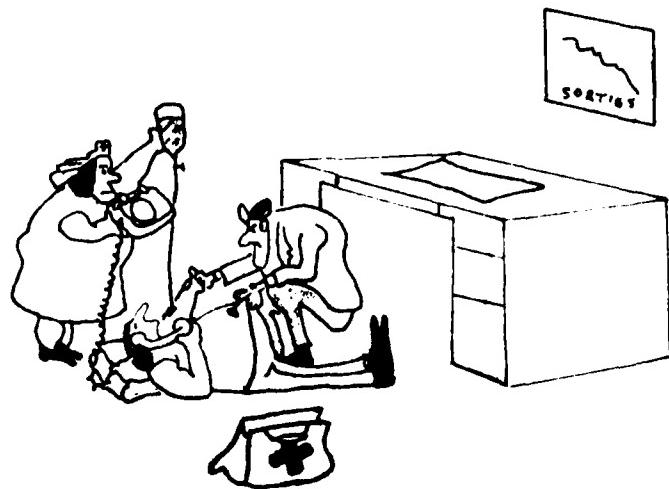
There are a number of demographic factors which help determine a person's susceptibility to stress-related diseases. Some of the key demographic factors implicated with these diseases (especially coronary heart disease) are gender, age, heredity, education, exercise, weight, diet, and tobacco use. (21:352)

How are these factors related to stress? Demographic factors greatly influence both the stress response and its impact. They also shape the perception of a stressor. Some illustrations help explain the relationship. A more fit executive is better prepared for responding to demands and will often respond effectively to a challenge. In contrast, a poorly conditioned executive is more likely to suffer stress-related health problems than is a more fit person who experiences the same stress. Also, there is much evidence that resistance to the stress response decreases with age. (7:567) Hence, demographic factors are key moderators of the relationship between stress and physical well-being.

PART II

COPING WITH STRESS

Since stress arises from many different sources, there are a number of effective methods of dealing with stress. The methods described in the following chapters are proper nutrition, aerobic exercise, relaxation, stressor management, and personal strategies. Each of these methods is an effective means of combating stress; however, proper nutrition and physical fitness are possibly the most important. A balance of proper nutrition and exercise also increases well-being, stamina, and life expectancy. (6:7-8) If you are tired of being marginally well or unable to control distress (like the executive below), continue reading and form a personal stress management plan.



Chapter Five

NUTRITION AND STRESS

A healthy diet is a key practice in preventing stress and moderating its impact. There are three primary reasons for this. First, improper diet and nutrition can add to stress by stimulating the stress response, contribute to stress by fostering emotional problems, or worsen the physical consequences of stress. (38:39) These problems arise not only from what you eat but also from how you eat. Second, the body draws down nutrient reserves during the stress response. If these reserves are already deficient, exhaustion and illness can develop more readily. (33:81) Third, "proper nutrition promotes health and helps a person absorb stress and avoid degenerative diseases." (15:20) In sum, diet is the single most important factor in promoting health and avoiding the effects of stress.

IMPROPER DIETARY HABITS AND STRESS

Careless Eating Habits. Many people under stress eat carelessly or compulsively, causing unbalanced diets. The over-stressed executive, pressed by many demands, often turns to readily available food products. Unfortunately, "convenience" and processed foods have their shortcomings. A tendency to consume these products can lead to protein, vitamin, and mineral deficiencies. (50:13) These dietary nutrients affect the way a person feels, thinks, decides, and perceives events. (28:8) A poor diet, therefore, can cause the executive to perceive or experience stress more readily.

Items to Avoid. More significantly, certain foods and beverages link with stress to increase the potential for experiencing illness and disease. If you are stress-prone, reduce your intake of or avoid the following items:

Cholesterol and fat. High levels of blood cholesterol are known to increase the likelihood of coronary heart disease. (46:46) A daily diet of products containing cholesterol and saturated fats--these fats spur the body to produce cholesterol--contribute to a rise in the blood cholesterol level. (9:56) Similarly, the stress hormones cortisol and adrenalin cause the body to produce more cholesterol. (46:46) Hence, stress combined with a diet routinely high in cholesterol and saturated fat can be deadly. This point is most important!

Sugar. Avoid eating simple carbohydrates (refined sugar products) during periods of stress. A brief example explains the problem. Moments after a candy bar is eaten, its entire sugar content enters the blood. In response, the body releases insulin to regulate and control the sugar level in the blood. Insulin is also a byproduct of the stress response. The sugar from the candy bar in conjunction with the stress response causes an excessive amount of insulin to be produced. The result is a rapid lowering of blood glucose (sugar), the primary fuel for the brain. (14:51; 28:11) When the

blood glucose level drops rapidly, the brain and central nervous system feel a shock. This reaction can manifest a number of emotional or psychological symptoms including anxiety, depression, insomnia, fatigue, headaches and others. (28:12)

Caffeine. Caffeine works with stress in several ways. As with sugar, caffeine spurs insulin production. (28:12) It can, therefore, foster a similar problem with insulin levels. In addition, too much caffeine (the amount found in four cups of coffee) destroys the body's thiamine, an important B vitamin. A mild thiamine deficiency causes irritability, nervousness, memory loss, or depression. (15:21)

Salt. Stress increases both sodium retention and blood pressure. Most Americans take in far more salt than is needed, and salt is "often cited as a cause of hypertension." (16:191) To stay healthy, be aware of the salt content in foods and limit salt intake. (15:21)

Tolerance levels for these items vary from person to person. Therefore, you should try to determine your body's reaction to them and adjust your consumption accordingly.

How to Eat. How you eat is almost as important as what you eat. Here are some potential problems and suggestions on this topic.

Eat more slowly. Several problems are caused by eating too rapidly. By gulping down food, the food is not mixed properly with digestive enzymes and digestion is incomplete. As a result, less than full nutritional value is obtained. Further, digestion is interrupted, stressing the digestive system. When eating rapidly becomes a habit, it becomes a source of chronic stress. (31:134-135)

Eat moderately sized meals. It is better to eat small meals frequently than to overindulge at a single sitting. Overeating taxes the digestive system and disrupts the blood glucose balance. (16:197)

Relax before meals. Remember, digestion ceases during the stress response. During a taxing day, try to take a 10-15 minute break before lunch and dinner.

Reduce your calorie intake during sedentary periods. You will be better prepared for responding to a challenge.

STRESS AND DIETARY NUTRIENTS

When the stress response is engaged, the hormonal and metabolic reactions consume essential vitamins and minerals. It is known that stress reduces calcium levels. Apparently, the amount of calcium absorbed during digestion decreases while the amount excreted by the body increases. Other vital minerals, such as potassium, zinc, copper, and magnesium, are also excreted during the stress response. (3:56) Vitamin B complex and vitamin C seem to be heavily used dur-

ing the stress response. (33:81) Maintaining proper levels of these nutrients are important. They not only support physical health, but deficiencies in these nutrients can lead to emotional disorders such as depression, insomnia, irritability, and nervousness. (16:192)

A Special Note. Calcium intake is especially important for female executives. To begin with, many women do not get enough calcium from their diets. Due to calcium loss, about one-fourth of American women have problems with osteoporosis (brittle bones) after menopause. For the female executive under stress, therefore, sufficient calcium intake is doubly important. (3:56)

THE PROPER DIET

"Proper nutrition will help you avoid stress and resist degenerative diseases." (15:20)

A balanced diet which includes foods from the four basic food groups is needed for proper nutrition. The groups are dairy products, meat and high protein foods, breads and cereals, and vegetables and fruits. By eating a variety of these foods, but only in the amounts needed to maintain desirable weight, you will obtain ample amounts of protein, carbohydrates, vitamins, minerals, and fats. (3:56) At the same time, you will moderate the shortcomings of certain foods. For example, red meat is a good source of protein, but it is also high in calories and saturated fat. Although variety is key, other factors also influence balance.

To balance calorie intake, Dr. Kenneth Cooper recommends that calories be distributed so 50 percent come from complex carbohydrates, 20 percent from protein foods, and 30 percent from fats. (6:39) Be aware, some nutritionists recommend diets with even less fat consumption. (16:173)

Complex carbohydrates include fruits, fruit juices, vegetables, beans, peas, potatoes, corn, pasta, whole grain bread, some cereals, and brown rice. (6:41) They provide a readily available and efficient source of glucose to fuel the brain and muscles. (45:3) While relatively low in calories, they also supply vitamins, minerals, and fiber. (6:41)

Protein is found in fish, beans, poultry, nuts, milk, yogurt, beef, pork, cheese, and eggs. Protein provides energy reserves and is used to grow and repair body tissue. (6:41; 45:3)

Fats come from many sources including vegetables, dairy products, and meat. (6:42) Fats are high in calories, but are an inefficient source of energy. The best sources of fat come from vegetables--margarine, corn oil, nuts, etc--because they are unsaturated or polyunsaturated. You should limit consumption of saturated fats because of their link with cholesterol. (45:3) Saturated fats are found in beef, ham, bacon, pork, whole milk, eggs, cheese, and cocoa butter. Since the typical diet is about 50 percent fat, you may need to work to reduce consumption to 30 percent. (16:173)

Given the preceding information, you are probably wondering how to balance meals to attain the right mix of foods. The answer goes beyond the scope of this handbook, but there are several ways to find an answer. First, a number of books can guide you in forming the right diet. Cooper's book, The Aerobics Program for Total Well-Being, describes several healthy diets. Dr. Robert Haas' book, Eat to Win, and Jane Brody's book, Jane Brody's Nutrition Book, are also informative sources. Second, the Chief of Nutritional Medicine Services or NCOIC of Nutritional Medicine Services at the base hospital or clinic will help you set up an appropriate diet. Any of these sources will describe the types and amounts of foods you should consume.

In addition to the above information, follow these recommendations to help establish better dietary habits.

1. Eat foods low in refined sugar. Besides their reaction with stress, they are high in calories and low in nutrition. (45:1) Therefore, avoid foods high in refined sugar--cakes, cookies, pastries, candy, ice cream, soft drinks, and presweetened cereals. (51:21) Save these items for special occasions.
2. Consume more nutritious foods, especially complex carbohydrates and high fiber foods like raw fruits and vegetables, and whole grain products. These foods are low in calories, high in nutrition, and aid digestion. (45:3-4)
3. Stay away from calorie packed foods such as chips, chocolate, milk shakes, hamburgers, fried foods, and vending machine snacks. (51:21)
4. Reduce saturated fat and cholesterol consumption by cutting back on eggs (three per week) and red meat (three to four times per week). (51:21) If possible, cut back even further.
5. Do not skip meals. You should "eat most of your calories before supper, with 25 percent of your calories at breakfast, 30 percent at lunch, and 45 percent at supper." (6:39)
6. If your spouse is the family's primary cook, have him/her read this chapter.

Chapter Six

STRESS AND EXERCISE

WHY EXERCISE?

Exercise is probably the most important means of becoming physically fit and buffering the effects of stress. Exercise which improves overall fitness reduces stress in several ways.

It improves the ability to deal with stressors. On the job, a fit person will have more energy and be more stable and alert. (17:189) When confronted with a demand, eustress is more likely to result.

Exercise moderates the stress response. First, exercise dissipates the stress hormones. Apparently it "acts as nature's waste removal process and helps the body return to equilibrium." (6:190-191) Second, it lessens the impact of the stress response. After a fight or flight response, the blood pressure and heart rate of an aerobically conditioned person will increase less than that of a less fit person. The more fit person's heart will also recover more rapidly. (20:285) This moderating effect can be instrumental in preventing a heart from overextending itself and causing a heart attack. Exercise, therefore, can help prevent stress from incurring harmful effects.

Exercise, especially aerobic exercises, can lessen the consequences of stress, particularly heart disease. Aerobics is highly beneficial for the cardiovascular system. It makes the system more efficient by accelerating the heart rate temporarily, and then causing a lowering of the resting heart rate, blood pressure, and cholesterol level. Aerobics is also believed to elevate HDL (high density lipoprotein) cholesterol levels. HDL lowers risk of heart disease by removing harmful cholesterol from arterial walls. In addition, exercise improves digestion and aids in maintaining proper weight. (6:107,113) Together, these benefits make a person less susceptible to stress-related illnesses.

Exercise improves one's emotional outlook. As a person's body improves with exercise, self-confidence increases and self-esteem climbs because the person feels good about his/her body. Moreover, others will develop a more positive perception of a fit person, reinforcing a positive self-image. (17:189)

"Many studies have shown that proper exercise improves the ability to relax. A relaxed person works and thinks more effectively." (4:10)

Exercise helps a person build an effective buffer against stress. As a result, a person will experience less stress-induced illness, tension, anxiety, and depression. (6:190)

AEROBIC EXERCISE PROGRAMS

Aerobic exercises are most frequently recommended for coping with stress. They "refer to those activities that require oxygen for prolonged periods and place such demands on the body that it is required to improve its capacity to handle oxygen." (6:13) Aerobic exercises benefit the lungs, heart, and vascular system. Aerobics usually involve endurance activities but do not require excessive speed. (6:13) This type of exercise promotes a person's total well-being and strengthens a person for stress.

ESTABLISHING AN EXERCISE PROGRAM

Getting Started. There are two important steps for tailoring an exercise program to your wants and needs. First, pick an aerobic activity (or activities) that interest(s) you. Second, establish and commit yourself to a regular schedule. (6:121) Three to four exercise sessions a week should enable you to attain and maintain an appropriate fitness level. How long should a session last? Recommendations vary from 12 to 30 minutes an exercise period, but the longer you exercise the better. (45:5)

Words of Advice. Before undertaking a program, beware that exercising can be harmful if done improperly or excessively. At the worst, exercising can induce a heart attack and sudden death. One can experience problems of a lesser degree such as muscle aches or tears, stiff joints, or tendon or ligament problems. Further, chronic fatigue can be experienced by those who overdo it. If you are always tired, try resting for a few days and then incorporate rest days into your exercise schedule. (16:148-149)

Advise for Older or Inactive People. If you are older or have not been exercising, plan on undertaking a slow-paced exercise program. You will be able to become more fit over a relatively longer period of time than others. Before you start exercising, check with a doctor to determine the level and degree of exercise you should undertake initially. (18:82) In addition, follow this advice.

1. Rest when you feel tired or winded. (18:83)
2. Do not compete with others or a stopwatch. Exercise at a comfortable pace. (18:83)
3. Work out slowly but regularly. This is the best way to build stamina, strength, and avoid muscle and joint injuries. (18:83)
4. Start with a moderate program like walking, and monitor your heart rate to ensure you do not overdo it. (18:83)
5. Strictly adhere to the warm up and cool down regimen described in the next section.

AVOIDING INJURY

To fully enjoy the benefits of aerobics and avoid injury and illness, a person needs to prepare for and recover from exercise properly. The following recommendations apply to all aerobic exercises, but especially to jogging.

Warm Up. Warming up is key to avoiding muscle pulls and improperly stressing the heart. To warm up, you need to increase your body temperature about two degrees. This makes muscles more pliable and less likely to tear. It also widens blood vessels so more blood can flow to the heart. Therefore, it becomes less likely that the heart will lack oxygen, which can make it beat irregularly or lead to a heart attack. You can include some stretching in your warm-up routine (do not bounce) to help prevent muscle tears. But stretching is not the same as warming up; your muscles need to produce heat. Perhaps the best way to warm up is to start slowly and to gradually increase the pace. (26:65) The warm up period should last about five minutes or until you start to sweat.

Cool Down Afterward. Perhaps the greatest risk to health comes after exercise is over rather than during the exercise. "You can protect yourself by cooling down properly as you complete an exercise session. Cooling down means slowing down gradually--continuing to use your muscles in the same way, rather than stopping abruptly." (26:65) When you stop an exercise suddenly, some blood may pool in your legs instead of flowing to the heart. Your blood pressure will drop and not enough blood will reach the brain. As a result, you could feel dizzy or even pass out. Or worse, you could have a heart attack. (26:65) "The best way to cool down and protect your heart is to slow down gradually for a few minutes (about five minutes) before you stop exercising." (26:65)

Maintain Your Body's Fluid Level. When you are thirsty your system has already lost too much fluid. "Body fluids keep you cool (sweat), eliminate body wastes (urine), provide fuel to the muscles, and carry away lactic acid." (45:29) Too much fluid loss will harm your health, so drink six to eight glasses of fluid a day and more if it is hot. Water is the best fluid because it is quickly absorbed by the body. Juices are also good sources of fluid. (45:29) Avoid products with high sugar content because they cause muscle cramping during exercise. The key is to take in fluids before, during, and after the exercise session.

Monitor Your Heart. For an aerobic program to be both safe and effective, the exercise needs to stimulate the heart to the proper level. The proper level or "target zone is the range within which you should exercise. The top of the range is 85 percent of your maximum heart rate; the bottom of the range is 70 percent of your maximum heart rate." (18:18) The target zones are based on age, and estimates are shown in Table 2. You need to attain the minimum target rate to benefit from exercise. However, you should stay below the maximum rate to avoid overtaxing your heart. To determine your heart rate, feel your pulse on your neck, wrist, or heart for six seconds and multiply the total by ten. Take your pulse before, during, and immediately after an exercise session. (45:6)

Age Range	Min-Max Rate per minute
21-25	138-167
26-30	134-163
31-35	131-159
36-40	127-155
41-45	124-151
46-50	120-146
51-55	117-142

Target Heart Rates (18:20)

Table 2

AEROBIC EXERCISES

Here are some aerobic exercises you can undertake. Since exercising can be harmful if not done properly, both the benefits associated with an exercise and the proper way of exercising are described. If possible, you should try different exercises. This will strengthen different muscle groups and help keep you interested in exercising.

Walking. Walking is a simple, convenient, and effective exercise. It is particularly appropriate if you are just beginning to exercise, out of shape, or overweight. Walking regularly and vigorously uses many different muscles, keeps joints flexible, and improves digestion and circulation. To be effective, you need to maintain a brisk pace, three to four miles per hour. A 20-minute walk is a good starting point. As with any endurance exercise, you should aim to keep your heart rate in the target zone as much as possible. (18:47-48)

Jogging. Jogging--steady, slow running--is one of the best endurance exercises because it strengthens the lungs, heart, and circulatory system. Jogging also redistributes weight, firms muscles, and flattens the abdomen. You can begin a jogging program by walking and gradually increasing the pace. (18:48)

Jogging guidelines. Jogging is not without some hazards, so follow these guidelines.

1. Always wear good, well cushioned shoes. Jogging on a hard surface strains the legs, joints, and lower back. A good pair of shoes can prevent unnecessary wear on these areas. Buy the best shoes you can afford. (18:49)
2. Use proper technique. Jog erect with your back straight and head up.

Keep your arms bent at the elbow with the forearms roughly parallel to the ground and slightly away from your body. (16:147)

3. There are several appropriate ways for the foot to strike the ground. Your foot can land toward the heel, rock forward, and push off from the ball of the foot. Or you can use a more flat-footed style and land on the entire bottom of the foot. Do not try to land on the balls of your feet; this causes leg and foot soreness. (16:148)

4. The shin muscles often ache when a person begins jogging for the first time or after a layoff. If this occurs, try the following exercise. While seated, point your feet as though trying to touch your shin with your toes. Repeat 10 times, alternating legs. (18:50)

5. Breath deeply through your nose and mouth. Do not hold your breath.

Bicycling. Bicycling is one of the best aerobic activities. Like jogging it largely uses the leg muscles but it causes less wear and tear on the joints and muscles than jogging. To attain your target heart rate, you will need to maintain a speed of 15 mph. (45:7) Remember, maintain a leisurely pace for the first and last five minutes of your ride.

Bicycling guidelines. Follow these rules to bike efficiently and safely.

1. Adjust the seat height so your knees stay bent when the pedal is fully depressed. (45:7)

2. Use a 10- or 12-speed bicycle. You will be able to shift gears for varying terrain or headwinds. (45:7) Also, make sure the bike is in proper working order.

3. Try to pedal about 90 revolutions per minute (rpm). Many people simply try to push harder at lower rpms when going up hill. This may seem like more work because your legs will ache from a build up of lactic acid. But it is aerobically inefficient. By properly shifting gears, you will bike more efficiently and probably longer if you maintain 90 rpm. (45:7)

4. Obey traffic regulations and use hand signals. And if you bike in traffic, use a helmet.

Swimming. Swimming is a superb endurance exercise. It has more aerobic value than jogging but does so without placing too much strain on any one part of the body. Swimming can be inconvenient since it requires a pool or body of water nearby. (18:50-51) For this reason, remarks about setting up a training regimen are not provided.

Other Exercises. There are a number of other aerobic activities you may want to attempt such as cross-country skiing (the best of all) and aerobic dancing. Handball, racketball, squash, and basketball also provide some aerobic benefit. (6:126,130)

INDOOR EXERCISES

What do you do when the weather is inclement? You can take your aerobic fitness program indoors when it is dark, cold, or snowy outside. For an acceptable level of fitness, try any of these exercises for about 30 minutes three or four times a week. (25:74)

Jogging in Place. Jogging in place can be as beneficial for your heart as jogging outdoors. Jogging in place also puts less strain on the legs but does not develop the hamstring muscles very well. (After spending a winter of jogging in place, you will need to be careful not to pull a hamstring when you start jogging outside.) (25:74) Further, since you will have a tendency to land on the balls of your feet, you can strain an achilles tendon. Wearing running shoes or landing flat-footed will lessen this problem.

Jogging on a Small Trampoline. Jogging on a trampoline is even safer than jogging in place. A great deal of shock, which is normally imparted to the body, is absorbed by the trampoline. (25:74) You pay a price, however, since it has less aerobic value--the equivalent of a 13-minute mile pace--than other forms of jogging. (6:131)

Rowing. Rowing can be aerobic, and it strengthens the back and arms. To adequately increase blood circulation, you should use a rowing machine with a movable seat. This way your entire body, not just your arms, is involved in the exercise. (25:74) Here are some tips on using a rowing machine.

When you row with a machine, you must move the seat back and forth with your legs. To develop resistance against your leg muscles, you must start each stroke by bending as far forward as you can and tilting your body forward. Start each cycle by pushing your feet against the stirrups. This will move your seat backward. Then move your upper body backward and finish off by pulling on the oars with your arms. (25:74)

Jumping Rope. Jumping rope is demanding and good for the entire body. Jumping the rope about 80 times a minute is equivalent to a seven minute mile pace. (25:74) You should jump rope in 15-minute intervals, taking breaks or extending the period according to your condition. Jumping rope might not be easy for the beginner; here are some guidelines on technique. Do not skip barefoot. When jumping, land on your toes, and do not jump more than an inch off the ground. This will make it easier to time the jumps. Keep your knees bent to absorb the shock of the foot strike. (25:74) Use your wrists, not your arms, to turn the rope; you will tire less quickly. (18:54)

Riding a Stationary Bike. Riding a stationary bicycle is good exercise. Bike machines which also involve the arms provide tremendous aerobic benefit. Be aware, however, that on most indoor machines you will work harder with less benefit than outdoor biking. (6:128)

"No matter what you do to stay fit, you should have an alternative indoor sport to help get you through injuries and foul weather." (25:74)

Chapter Seven

RELAXATION

WHY RELAX?

The ability to relax can greatly help control stress. Relaxing decreases or alleviates the fight or flight response. The idea is to change the body's reaction to stress and decrease breathing rate, blood pressure, and metabolism. (50:14) Almost any form of physical exertion after a distressing event will dissipate the stress hormones. Relaxing also can help you think more clearly so problems can be solved more readily. (4:10) Methods of relaxing range from simply taking a walk to deep breathing to meditation. Hence, both physical and mental means of relaxing are discussed in this chapter.

RELAXING EXERCISES

How do relaxing exercises help? During a mentally taxing day, the muscles store up tension. The accumulation of tension-stress can result in headaches, backaches, or neck and shoulder pains. The muscles will adapt to states of increased tension unless given relief. This tension can be relieved without working up a sweat by changing activities. (4:10)

Stretches. The following exercises are geared to relieve muscle tension. Use these exercises only to the degree to which you are comfortable.

Head Rotation. Begin by sitting or standing comfortably but erect. Then rotate your head to the right as if to look over the shoulder, keeping the shoulders level. Reverse the rotation while moving only your head and neck. (41:95)

Head Nods. Use the same beginning position and slowly bring your chin down to your chest. Then reverse the direction. Do not strain; let gravity do the work. (41:95)

Ear to Shoulder. Again, same beginning position. Rotate your head so your right ear approaches your right shoulder. Face forward and keep your shoulders level. Reverse direction, allowing gravity to work. (41:95-96)

Shoulder Roll. Stand or sit with the arms hanging loosely and rotate each shoulder alternatively. Reverse directions.

Back Stretch. While standing, place the heals of the hands on either side of the spine just above your buttocks. Slowly push forward at the hips while bending your head and trunk comfortably backward. Keeping the hands in position, slowly bend forward as far as possible without straining. (31:156)

Breathing. If you do not have the opportunity to attempt even these simple

exercises, try breathing from your diaphragm. For diaphragmatic breathing, concentrate on moving air down to your upper abdomen. You will notice your abdomen move in and out, but your chest should remain relatively still. Repeat, taking deep breaths six or more times. This will help restore physiological balance and a more relaxed state. (31:193)

When You Cannot Exercise. When you do not have time to follow a regular exercise regimen, try to add some form of physical exertion to your daily routine. For example, you can climb stairs instead of using an elevator, walk instead of riding, or park at the far edge of a parking lot. This type of activity will "burn" stress hormones and help you relax. (27:5)

MENTAL RELAXATION

Relaxing mentally is another beneficial means of reducing stress. This technique is effective because both the muscles and the stress response relax when the mind is relaxed. "There are four key components of the relaxation response: a quiet environment, a comfortable position, a passive attitude, and a mental device." (33:82) Some mental devices include mental imagery, meditation, listening to music, electronic training (biofeedback), yoga, and self-hypnosis. (14:50) Since mental imagery and meditation are the most practical methods to use at the office, they are the only methods discussed here.

Mental Imagery. With imagery the imagination is used to visualize calming situations. For example, you could imagine yourself taking a peaceful walk through a forest. In any case, the "theme" which will have the greatest calming effect should be selected. (14:50)

Meditation. Meditation induces a relaxed state by distracting the mind from all thoughts. This can be accomplished by concentrating on a single object, mental image, or thought while blocking out all other thoughts. Meditation is often used in conjunction with imagery. Meditation is difficult to master completely; if you wish to use it, you may need to attend a lecture or read a specialized text. (14:50)

Relaxation techniques have been proven to be effective. (47:3-68) However, some people hesitate to use them because it takes time away from work. You should not feel guilty about taking time to relax. Only 10 to 20 minutes a day needs to be devoted to relaxing. And a relaxed person thinks more clearly and therefore works more effectively. So, do not hesitate to use one of the methods described above.

Chapter Eight

STRESSOR MANAGEMENT

Managing stressors usually requires a multi-dimensional approach because stressors are often interrelated. This section begins by describing methods of dealing with specific stressors. Then approaches for dealing with stressors in general are discussed.

DEALING WITH STRESSORS

Here are a few concisely stated means of dealing with stressors.

Work Overload and Time Pressures. You can reduce quantitative overload and time pressures by managing time, reducing demand, setting goals, using a support network, and delegating. Qualitative overload is lessened by improving competence through education and training. (44:72)

Role Conflict and Role Ambiguity. These stressors are reduced by improving communications with superiors and peers. To lessen role conflict, try to establish a clear picture of your organization's conception (especially your boss') of your role. If needed, obtain instructions on how best to fulfill the role. (44:72) Also, make sure your superiors and co-workers follow a clear chain of command. To diminish ambiguity, obtain a clear explanation of the dimensions of your job. A written job description, more comprehensive than found on an OER or APR, might be appropriate for complex positions.

Poor Interpersonal Relations. Reducing conflict is one way of preventing poor interpersonal relations. Interpersonal conflict often arises from competing personal demands or differing needs and values. (47:3-82) You can remove conflict by clarifying values and setting clear priorities. Conflict can be resolved more readily by maintaining open, sincere, and tactful communications. (24:82-83)

Organizational Climate. Try to choose or alter your work environment to fit your needs. Although this may not be within your control, you may be able to select certain tasks and additional duties. (38:40)

Responsibility for Others and Job Pressures. Several methods should be used to lessen the impact of these stressors. A combination of delegating, taking control, and using a support team are effective ways of dealing with these stressors.

DEVELOP A SUPPORT TEAM

When professional relations are clearly defined and properly structured, a support team can be developed. A support team provides task achievement,

appraisal, social, and informational assistance. The team helps manage work demands and satisfy emotional needs. (34:43-44)

Here are some suggestions for fostering support.

1. Always seek advice, information, and feedback during and after crisis or emergency situations. Do not overreact; seek a balance of information processing and timely decision making during emergencies. (34:44)
2. Be an active listener. Good eye contact, patience, and a nonjudgmental attitude will aid this process. (34:44)
3. Be honest and straightforward in all working relationships. (34:45)
4. Reward the members of your support team when you are successful.
5. Make it a practice to exchange information with team members. (34:45)
6. Be loyal. Loyalty fosters mutual support.

Using the above guidelines provides only a foundation for building a support team. Active collaboration and participation with team members will cement relations. A norm of information exchange and mutual support enhances work efforts. Further, the right amount of involvement and direction is needed on delegated projects. Together these actions will mold an effective and dependable support team which enhances working relations and enables the executive to meet demands. (34:45)

REDUCE DEMAND

Stress can be decreased by reducing demands, but this task is not always easy or even possible. Certain job obligations, for example, incur demands which must be met. It is the less important and some self-imposed demands that should be eliminated. Here are some recommendations.

Establish Priorities. Identify the most important activities and delay or give up those with lower priority. You should start with the top priority and proceed in sequence. (24:94)

Eliminate Activities. Demand is decreased when an activity, any activity, is eliminated from an overloaded schedule. Keep in mind Pareto's Principle: 20 percent of the tasks provide 80 percent of the value. So focus on the top-most tasks. (48:3-5) Further, many executives work very hard on the job and also lead complicated, overactive social lives. In this case, reducing the number of social activities can be helpful at relieving distress. (24:95)

Simplify Activities. The prospect of undertaking a large, complex project can be overwhelming. The key to making a project appear manageable is to outline the component parts. Then tasks can be ranked and a reasonable schedule established. In other words, a project can appear to be achievable if it is

tackled one step at a time. (24:95)

Schedule Demands. Some demands cannot be eliminated or reduced, but they can be scheduled so you do not have too many to deal with at a given time. If demands are scheduled, you can retain control and be more comfortable. (24:96)

Limit Unreasonable Demands. Demands imposed by others are sometimes unreasonable or impossible to meet. Try to eliminate or simplify these demands, when possible. Also, you should refuse unnecessary tasks, especially from friends and peers.

Managing time is also an effective means of controlling and reducing demand.

TIME MANAGEMENT

Time is both a valuable and limited resource. Planning and organizing time is one of the best methods of dealing with stress. It enables you to more effectively deal with quantitative overload and time pressures. It also helps prevent hassles such as meetings and interruptions from becoming distressful. Time management fosters eustress because it enables you to better attain objectives. At the same time, you will have more time for enjoyable activities.

Using Planning Time. The most important aspect of time management is to schedule daily, uninterrupted planning time. Use planning time to identify and rank order goals. (46:49) One approach is to assign all tasks to one of three categories.

1. Must Do. This list includes tasks you must accomplish to do your job. (42:8)

2. Should Do. This list involves tasks that need to be done but are not urgent and can be delayed. Over time, these tasks will move to another list. (42:8)

3. Don't Do. This list includes tasks which should be completed but do not need to be. (42:8)

Manage Your Goals. After you have organized goals, set firm priorities for each day. Here are some ideas.

1. Take on difficult or less interesting tasks during times when your energy levels are highest. Most people are at their best in the morning. (48:3-9)

2. Schedule time for must-do items and set personal deadlines. Also, do not put off suspended tasks until the last moment. If you delay, you may not have time to complete unforeseen tasks which might arise. (48:3-9)

3. Anticipate tasks and suspense. Plan ahead and you will minimize crisis situations.

4. Include tasks you enjoy doing or that will improve wellness on the must-do list.

Even with good time management, you will still only be able to accomplish a finite amount of work. Keep your expectations reasonable and you will keep stress under control. (24:94)

Control Time Wasters. To acquire time to manage and attain your goals, you need to use time efficiently and eliminate time wasters.

1. Use your administrative help; have them screen and sort correspondence into categories. (42:4) They can also screen telephone calls.

2. Handle each piece of paperwork once. (42:4) Read it and decide what to do with it.

3. Return calls and visits as soon as you can. (42:5)

4. If you have an open-door policy, schedule periods for visitors.

5. Keep busy during periods when you are inadvertently kept idle. For example, you can read your mail while waiting for a meeting to start. (42:9) You can also use idle time to plan ahead or relax.

6. Limit or prevent interruptions. Set a time limit on informal meetings and discussions. Stand when visitors walk in and lead them to the door when the session should be over. You can also anticipate interruptions and allot free time on your calendar for them. (48:4-2)

7. Do not over use your list of priorities; you will waste time.

Control Meetings. A group of 90 senior Air Force executives listed attending meetings as stress producing and wasteful of time. Here are some hints on how to approach meetings.

1. Make sure a meeting is necessary. For example, find out if the issue can be resolved by a conference call. (48:5-2)

2. Ensure your attendance is required and essential. (48:5-2)

3. If you are the chairperson, start on time, follow the agenda, minimize the number of participants, and set a time limit. (48:5-2 - 5-3)

4. Never attend a meeting which does not have a stated objective and agenda. This is most important!

5. Avoid the temptation to contribute to the BS.

DEALING WITH A STRESS-PRODUCING EXECUTIVE

This section discusses the problem of dealing with the demanding, stress-producing executive from two perspectives. For the distressed employee, two methods of adjusting the boss' behavior are identified. For the distressing executive, a less demanding style of dealing with employees is shown.

THE DISTRESSED EMPLOYEE

Seek Information. When faced with excessive demands and inadequate support, ask for as much information as possible. Try to pinpoint the boss' standards and the specific conditions under which work is to be completed. Most supervisors will respond favorably when they learn you want to do the job well but lack information. (8:64)

Reinforce Appropriate Behavior. Be on the watch for the type of behavior you want to see in a supervisor. This could occur when the boss is more pleasant or relaxed, or when he/she has made an effort to properly guide a task. Since supervisors need constructive feedback (like everyone else), show your appreciation and praise the boss. This is not flattery but rewarding proper behavior. When repeated, this approach is a form of positive behavior modification which can cause a marked change in the way the boss deals with subordinates. (8:64)

THE SUPPORTIVE EXECUTIVE

In contrast, "a supportive boss is a key defense against job stress." (43:28) One study reported that employees with supportive bosses suffered half as much stress-related illness than those with non-supportive bosses. (43:28) Here are some ways you can help subordinates cope with stress.

1. Give employees the tools (e.g. feedback, direction, etc.) to solve problems. Then allow them to resolve the problems. (43:28)
2. Try to insulate subordinates from irrelevant problems and unnecessary correspondence. (43:28)
3. Encourage employees to ask questions and promote improved ways of performing. (43:28)
4. Be more concerned with results and avoid being a stickler for complying with rules. (43:28)
5. Seek feedback about tasks and suspenses to ensure they are reasonable.

Keep in mind you control the future and comfort of subordinates. A supportive approach and favorable comments make employees feel good. As a result, their self-esteem and self-confidence will increase. (8:63) Eustress will likely result, benefiting both the employee and the organization. (36:4) On

the other hand, an overly authoritarian approach or a nasty comment will foster uncertainty and distress.

Chapter Nine

PERSONAL STRATEGIES

This chapter focuses on personal strategies for managing stress. Self-awareness, monitoring your heart, changing Type A Behavior, and the Hardy Executive are discussed.

SELF-AWARENESS

Improving self-awareness is almost a prerequisite for reducing stress. The ability to apply stress-reducing techniques depends a great deal on how well you know yourself. (50:12) Self-awareness includes self-consciousness, self-attention, and internal commitment. Regardless of the label, it involves knowing one's mind and body. Research has shown that people who are self-aware and monitor themselves encounter less illness than those who do not possess these attributes. (29:214)

To improve self-awareness, you need to assess your strengths, weaknesses, needs, values, interests, fears, health (and its various aspects), use of time, etc. Talk to others to obtain feedback about yourself and your life style. By being more self-aware, you can make necessary changes and adjustments. Self-knowledge will also help you tailor needs, values, and personality to fit various situations. (50:12) For example, by determining you have a high need for clarity, you will know to either avoid ambiguous situations or learn to tolerate ambiguity. Finally, by knowing your strengths and limits, you can set realistic goals and successfully attain those goals. In sum, a great deal of stress can be eliminated by clearly defining oneself.

MONITORING YOUR HEART

Monitoring the condition of your heart is an important part of self-awareness because of the relationship between stress and heart disease. In a test of 150 supposedly healthy US Army colonels, 20 percent were found to have one or more of their three main arteries at least 75 percent obstructed. The surprising fact is that most of these officers exercised regularly. Apparently, exercise could not overcome the problems associated with stress and poor diet. (11:241-242) For this reason, two methods of assessing your heart's condition are described in this section.

Self-Assessing Total Risk. A simple means of evaluating your heart is to take the self-scoring quiz in Table 3. The quiz includes six factors that affect the risk of heart attack or stroke. To take the quiz, find the number that fits you for each risk category. Total the score, and compare it with the "Total Risk" guide. If your score is "Average" or higher, you probably need to develop a program which deals with all six categories and perhaps consult a physician. (Being average does not necessarily equate with being free of

risk.) (9:32)

To be able to complete the quiz, you need to know if your weight is in a desirable range. The ranges, according to height, are shown in Table 4.

Factor	Score
Smoking	0 Nonsmoker 2 Less than 20 cigarettes a day 4 20 or more cigarettes a day
Weight (Table 4)	0 Desirable 2 Up to 10 percent over 4 Over 10 above
Systolic Blood Pressure	0 Less than 120 2 120 to 140 4 Over 140
Cholesterol	0 Less than 150 2 150 to 250 4 Over 250
Exercise	0 Regular exercise 2 Moderate exercise 4 Sedentary
Stress Level	0 Rarely stressed 2 Tense twice a day 4 Usually tense
Total Risk	0-4 Low 5-9 Less Than Average 10-14 Average 15-20 High 21-24 Very High

Gauging Heart Disease Risk (9:32)
Table 3

Height (in)	Men's Weight (lb) Range	Women's Weight (lb) Range
76	164-204	
75	160-199	
74	156-194	
73	152-189	
72	148-184	138-173
71	144-179	134-168
70	140-174	130-163
69	136-170	126-158
68	132-166	122-154
67	128-161	118-150
66	124-156	114-146
65	121-152	111-142
64	118-148	108-138
63		105-134
62		102-131
61		99-128
60		96-125

Your Healthiest Weight Range (9:42)
Table 4

Evaluate Cholesterol Levels. A more reliable but more involved means of gauging the state of your cardiovascular system is to assess the level of cholesterol in your blood. Cholesterol is essential for the body to function properly, but "high blood cholesterol is known to result in coronary artery disease." (46:46) Three factors are important: total cholesterol, HDL cholesterol (HDL), and the ratio of total cholesterol to HDL.

Cholesterol is considered a risk factor in heart disease. It can accumulate on the walls of blood vessels--"an ailment often called 'hardening of the arteries.'" (6:81) You should strive to attain a total cholesterol level of 180 mg/dl or lower. (6:85)

HDL cholesterol, in contrast, reduces the risk of disease by removing cholesterol from arterial walls. (23:52) Statistics show that low HDL levels are associated with heart attacks. The level of HDL in the blood seems to increase with exercise and decrease with cigarette smoking and coffee consumption. (9:65-66) HDL levels should be above 45 mg/dl in men and over 55 mg/dl in women. (6:83)

The ratio of total cholesterol to HDL is an excellent indicator of a

person's heart disease potential. The higher the ratio the greater the risk. (12:60) Preferably, a man's ratio should be 4.5 or lower. For a woman, the ratio should be 3.5 or under. (6:83) Additional information about ratio and the degree of heart disease risk is provided in Table 5.

Risk Category	Male	Female
Very Low	3.5 or lower	3.5 or lower
Low	3.6-5.5	3.6-4.5
Moderate	5.6-6.5	4.6-5.5
High	6.6-7.5	5.6-6.5
Very High	7.6 or higher	6.6 or higher

Ratio Ranges and Heart Disease Risk Category (49:13)
Table 5

To find out your cholesterol levels, specifically ask to have both total cholesterol and HDL measured when you are seen by a physician.

What should a person do if their ratio is in an unsatisfactory range--moderate or higher? In many instances, an unhealthy ratio can be improved. Obviously, this involves lowering blood cholesterol and elevating HDL levels. A regimen of controlling stress, proper diet, and exercise is the ideal means of improving the ratio. However, a person should begin by consulting a physician.

CHANGING TYPE A BEHAVIOR

Type A behavior can be changed and improved. For the most part, you can adapt Type A behavior to your advantage. Type A persons are overly job involved, hard driving, and competitive. These components of Type A behavior can be beneficial if moderated. Type A persons also possess a sense of time urgency and impatience. These traits need to be modified to limit stress. If you are a Type A person--demonstrating six or more of the signs identified in Chapter Four--use these suggestions to take advantage of your style of behaving.

Job Involvement. While the job is important and you must be committed to it, you need to be committed to other self-interests. In other words, the Type A person needs to broaden interests to gain more satisfaction from life. (10:221) Further, a person cannot afford to become so involved with the job that he/she pays insufficient attention to health or family.

Hard Driving. The key here is not to push yourself to the limit of your

endurance. Try to balance work commitments with commitments you enjoy. Take time on the job to relax. (17:111)

Competitiveness. This attribute can be an asset to health if channeled properly. Competition in athletic endeavors is usually very beneficial. On the job, Type A persons need to set realistic performance standards and compete with those standards.

Time Urgency and Impatience. Perhaps most important, the Type A person needs to control feelings of urgency and impatience. These traits, more than the others, foster the Type A person's feelings of hostility and aggression. Here are some tips.

1. Try to optimize work load; practice time management.
2. Stop polyphasic activities. (11:195) Concentrate on only one task at a time. (17:110)
3. Remind yourself the most important tasks provide the greatest return. (11:257) So, revise your schedule of activities and focus on the important tasks. Try to maintain a flexible schedule and eliminate unnecessary tasks. (11:188)
4. Realize that not all work must be accomplished immediately. It is usually more important to complete a task properly than quickly. (17:110)

Perhaps the best approach is to develop a positive outlook, like that of the "Hardy Executive."

THE HARDY EXECUTIVE--COMMITMENT, CONTROL, CHALLENGE

Research suggests that executives with psychological strengths of commitment, control, and challenge are better able to handle stress than others. These "hardy executives experience high degrees of stress without falling ill and have a personality structure that differentiates them from persons who become sick under stress." (30:97)

Commitment. They become deeply involved in and committed to their activities (including their work). They participate in activities they find interesting and enjoy. (30:97)

Control. They have an internal locus of control and believe they can control or influence events. (30:97)

Challenge. They accept and welcome demands as challenging. They see a need to overcome the obstacles to success. (32:38)

Executives with these traits are motivated to respond to demands and create a positive outcome. They do not see difficult tasks as opportunities for failure. Instead they see the challenge of succeeding. Hardy executives do

not possess an innate resistance to change or new ideas. They have a positive outlook and "make things happen." (30:98)

Although it is not easy, a technique called situational reconstruction can help you develop the traits of a hardy executive. Recall a stressful event and imagine three ways the outcome could have been worse and three ways it could have been better. Then, identify some ways of attaining the better outcomes. The idea is to see there is a range of outcomes associated with any demand and that you can overcome demands with commitment, control, and challenge. (32:42)

FORMING A PLAN

You can increase your ability to control stress. To begin, decide you are going to manage stress. Once you decide, you must take the time and make an effort to accomplish the task. Next, increase your self-awareness and assess your health, personality, and work environment. Determine whether you are demonstrating any of the signs of stress described in Chapter Two. Also, look for personality and work-related factors that could cause you to experience excessive stress (Chapters Four and Three, respectively). This will give you a good idea of the problem areas to target. Keep in mind, you are not trying to eliminate all stress, just distress. Finally, develop a plan tailored to your circumstances and personality. The plan should include some combination of the methods described in the Chapters Five through Nine. Hopefully, this will reinforce some of the positive things you are already doing and add to your current capabilities. Stress management leads to a more healthy life-style and provides peace of mind, the key ingredients for enjoying life. (15:24)

"There is only one corner of the universe you can be certain of improving, and that's your own self."

Aldous Huxley

BIBLIOGRAPHY

1. Adams, John D. Understanding and Managing Stress: A Book of Readings. San Diego, Ca: University Associates, Inc., 1980.
2. Albanese, Robert. Managing Toward Accountability and Performance. Homewood, IL: Richard D. Irwin, Inc., 1981.
3. Barrier, Phyllis M. "Eating to Prepare for Stress." Nation's Business, Vol. 74, No. 8 (August 1980), p. 56.
4. Berg, Freda. "Don't Sweat It! Relaxing Reduces Stress Too." Data Management, Vol. 22, No. 10 (August 1984), p. 10.
5. Brown, David S. "How to Cause Stress in Others." The Bureaucrat, Vol. 14, No. 1 (Spring 1985), pp. 60-61.
6. Cooper, Kenneth H. The Aerobics Program for Total Well-Being. New York, NY: M. Evans and Company, Inc., 1982.
7. Davidson, Marlyn J. and Cary L. Cooper. "A Model of Occupational Stress." Journal of Occupational Medicine, Vol. 23, No. 8 (August 1981), pp. 564-574.
8. Fiedler, Fred E. "Why the Boss Makes You Feel Stupid." Industry Week, Vol. 212, No. 1 (11 January, 1982), pp. 63-64.
9. Fisher Arthur. The Healthy Heart. Morristown NJ: Silver Burdett Company, 1981
10. Friedman, Meyer and Ray H. Rosenman. Type A Behavior and Your Heart. New York, NY: Fawcett Crest, 1974.
11. -----. and Diane Ulmer. Treating Type A Behavior and Your Heart. New York, NY: Alfred A. Knopf, 1984.
12. Fye, Samuel P., Capt, USAF, and Charles W. Staton, First Lt, USAF. "Individual and Organizational Variables' Relationship to Coronary Heart Disease." Master's thesis, School of Systems and Logistics, Air Force Institute of Technology, Air University, Wright-Patterson AFB, Oh, 1981.
13. Garland, Hugh A., Maj, USAF. "Executive Emotional Stress." Research study prepared at the Air Command and Staff College, Air University, Maxwell AFB, Al, 1977.
14. Garry, William W. "Integrating Wellness into Learning." Training and Development Journal, Vol. 34, No. 7 (July 1980), pp. 48-54.
15. Gmelch, Walter H. "A Regimen for Stress Reduction." Supervisory

- Management, Vol. 27, No. 12 (December 1982), pp. 16-24.
16. Goldberg, Philip. Executive Health. New York, NY: McGraw-Hill, Inc., 1978.
 17. Greenberg, Jerrold S. Comprehensive Stress Management. Debuque, Ia: William C. Brown Company, Publishers, 1983.
 18. Halper, Marilyn S. and Ira Neiger. Physical Fitness. New York, NY: Holt, Rinehart, and Winston, 1981.
 19. House, James S. "Occupational Stress and Coronary Heart Disease: A Review and Theoretical Integration." Journal of Health and Social Behavior, Vol. 15, No. 1 (March 1974), pp. 12-27.
 20. Keller, Sandra and Peter Seraganian. "Physical Fitness Level and Autonomic Reactivity to Psychosocial Stress." Journal of Psychosomatic Research, Vol. 28, No. 4 (1984), pp. 279-287.
 21. Matteson, Michael T. and John M. Ivancevich. "Organizational Stressors and Heart Disease: A Research Model." Academy of Management Review, Vol. 4, No. 3 (July 1979), pp. 347-357.
 22. -----. and John M. Ivancevich. "Stress and the Medical Technologist: A General Overview." American Journal of Medical Technology, Vol. 48, No. 33 (March 1982), pp. 163-168.
 23. McDonald, Thomas J., Capt, USAF. "An Assessment of the Relationship Between the Coronary Prone (Type A) Behavior Pattern, Stress, and Coronary Heart Disease." Master's thesis, School of Systems and Logistics, Air Force Institute of Technology, Air University, Wright-Patterson AFB, Oh, 1982.
 24. Mills, James W. Coping with Stress--A Guide to Living. New York, NY: John Wiley and Sons, Inc., 1982.
 25. Mirkin, Gabe and Mona Shangold-Mirkin. "Let It Snow! You Can Take Your Fitness Program Indoors." Nation's Business, Vol. 72, No. 1 (January 1984), p. 74.
 26. ---- and Mona Shangold-Mirkin. "Cool Down the Right Way." Nation's Business, Vol. 72, No. 5 (May 1984), p. 65.
 27. Moe, Karl O., Maj, USAF. "Stress and Stress Management." Paper presented to the Air Command and Staff College, Air University, Maxwell AFB, Al, 2 July 1985.
 28. Murray, Stuart and Jim Francis. "Nutrition and Decision Making." Business Horizons, Vol. 23, No. 4 (August 1980), pp. 7-14.
 29. Nelson, Debra A. and James C. Quick. "Professional Women: Are Distress

and Disease Inevitable?" Academy of Management Review, Vol. 10, No. 2 (April 1985), pp. 206-218.

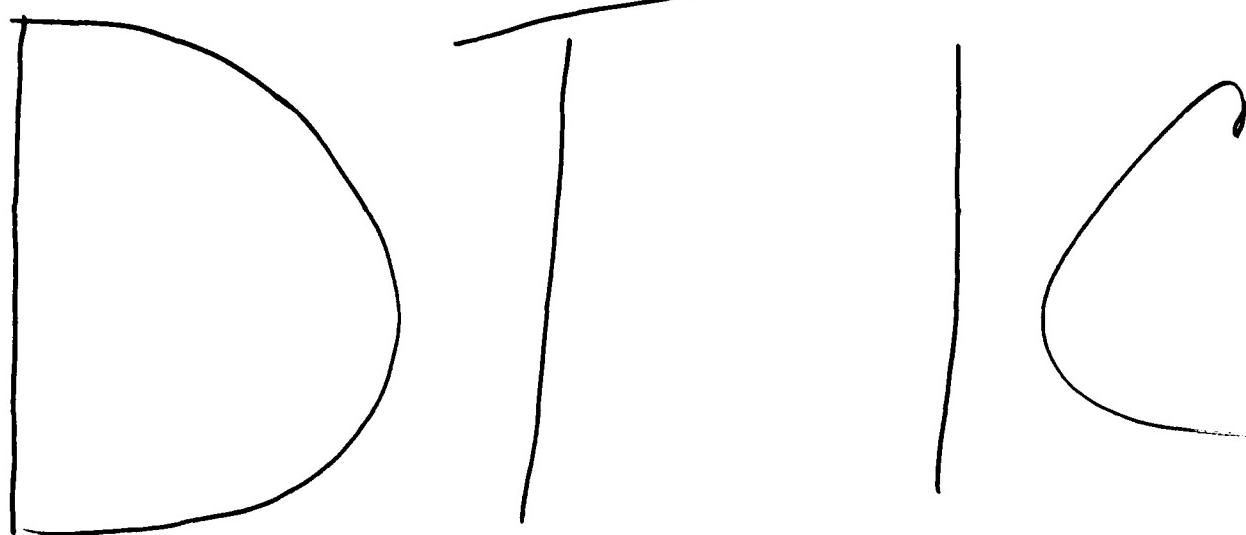
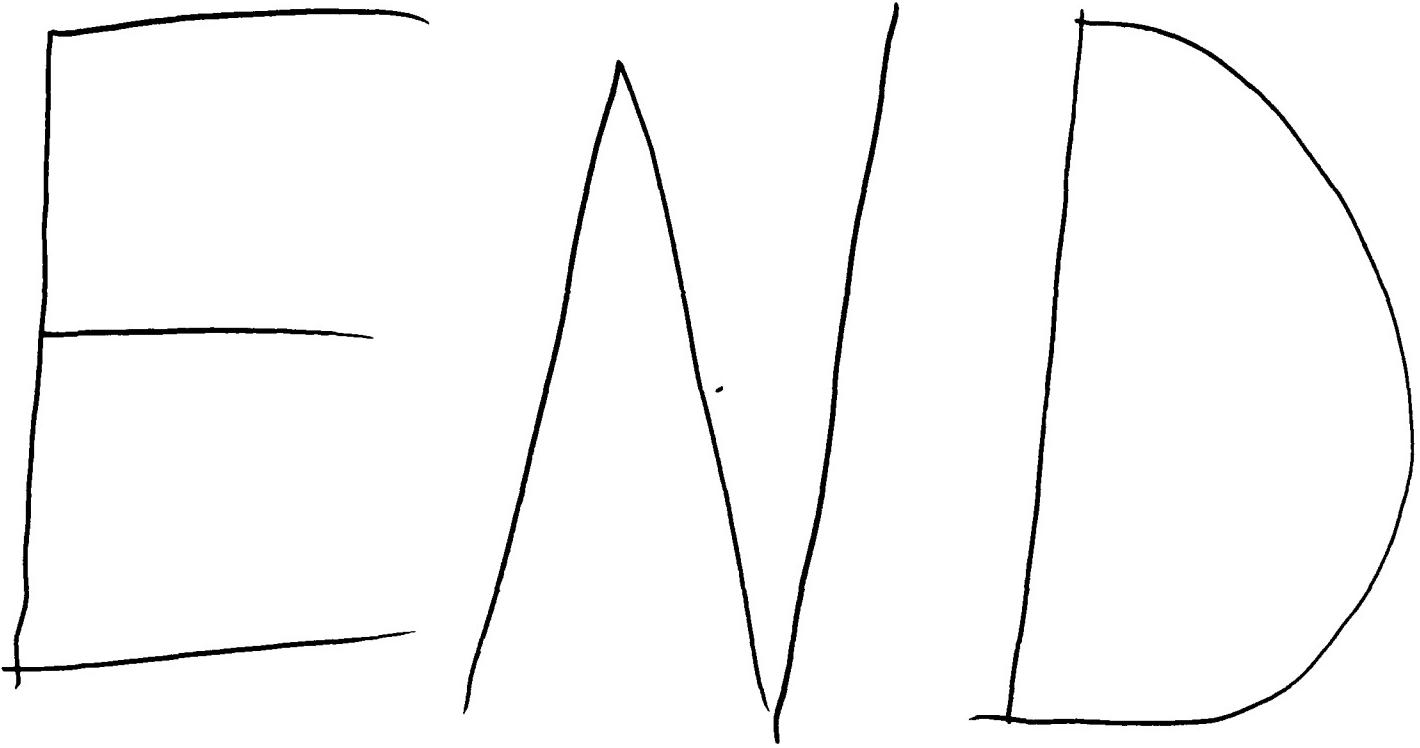
30. Niehouse, Oliver L. "Stress and the Hardy Executive." Industry Week, Vol. 223, No. 4 (12 November, 1984), pp. 96-98.
31. Nurenberger, Phil. Freedom From Stress. Honesdale, Pa: Himalayan International Institute of Yoga Science and Philosophy, 1981.
32. Pines, Maya. "Ma Bell and the Hardy Boys." Across the Board, Vol. 30, No. 4 (July/August 1984), pp. 37-42.
33. Quick, James C., Colleen Shannon, and Jonathan D. Quick. "Managing Stress in the Air Force: An Once of Prevention." Air University Review, Vol. 34, No. 4 (May/June 1983), pp. 76-83.
34. ----- and Jonathan D. Quick. "How Good Working Relationships Can Help Relieve Pressure on the Job." Management Review, Vol. 73, No. 5, (May 1984), pp. 43-45.
35. ----- and Jonathan D. Quick. "Preventive Stress Management at the Organizational Level." Personnel, Vol. 61, No. 5 (September/October 1984), pp. 24-34.
36. Ritzky, Gary M. "Positive Stress Makes Things Happen." Personnel Administrator, Vol. 24, No. 4 (April 1983), pp. 4+.
37. Rosch, Paul J. "Coping with Stress on the Job." Nation's Business, Vol. 72, No. 1 (January 1984), p. 65.
38. Sailer, Heather R., John Schlacter, and Mark R. Edwards. "Stress: Causes, Consequences, and Coping Strategies." Personnel, Vol. 59, No. 4 (July/August 1982), pp. 35-48.
39. Sapolsky, Robert M. "Stress and the Successful Baboon." Psychology Today, Vol. 18, No. 9 (September 1984), pp. 61-65.
40. Schuler, Randall S. "Definition and Conceptualization of Stress in Organizations." Organizational Behavior and Human Performance, Vol. 25, No. 2 (April 1980), pp. 184-215.
41. Schwartz, Jackie. "The Human Side." Office Administration and Automation, Vol. 45, No. 9 (September 1984), pp. 95-96.
42. Squyres, Ted T., Maj, USAFR. "Coping With Stress--The Air Force Officers Guide." Research study prepared at the Air Command and Staff College, Air University, Maxwell AFB, Al, 1982.
43. "Stress: The Boss Makes the Difference." Management World, Vol. 13, No. 4 (April/May 1984), p. 28.

44. Stoner, Charles R. and Fred L. Fry. "Developing a Corporate Policy for Managing Stress." Personnel, Vol. 60, No. 3 (May/June 1983), pp. 66-76.
45. Thomas, Jules, S., Maj, USAF. Executive Fitness. Handbook. Maxwell AFB, Al: Air Command and Staff College, Air University, undated.
46. Troxler, Raymond G., Col, USAF and Harry P. Wetzler, Lt Col, USAF. "Executive Stress: The Symptoms, the Cause, the Cure." Air University Review, Vol. 32, No. 3 (March/April 1981), pp. 43-52.
47. US Air Force Air University. Concepts of Leadership. Maxwell AFB, Al: Air Command and Staff College, 1985.
48. US Air Force Air University. Effective Use of Your Time. Pamphlet. Maxwell AFB, Al: Leadership and Management Development Center, undated.
49. US Air Force Air University. Executive Health Assessment and Fitness Program. Maxwell AFB, Al: Air War College, August 1985.
50. US Army Organizational Effectiveness Center and School. Management of Stress in Organizations. Handbook RB 26-13. Fort Ord, Ca, 1981.
51. US Department of the Air Force. Behavior Modification Related to Food AF Pamphlet 166-10. Washington DC: Government Printing Office, 28 February 1983.

INDEX

- Abilities, 12
Aerobic exercises, 21-23
program, 19-21
Anxiety, 6, 7, 14, 18
Backaches, 5, 7, 24
Behavioral signs, 6, 7
Bicycling, 22, 23
Blood pressure response to stress, 2, 6, 7, 24
during exercise, 20
gauging risk, 33
Breathing, 24-25
Caffeine, 15
Calcium, 15, 16
Carbohydrates, 16, 17
Cholesterol, 6, 14, 16, 17, 18, 33, 34-35
Coronary heart disease, 6, 12, 14
Demands and executives, 9, 10
and stress, 2
control of, 27-28
excessive, 10
time, 8
Demographic factors, 12, 33, 34
Depression, 6, 7, 15, 18
Diet, balanced, 16, 17
Digestive problems, 5, 7
Distress, 2, 4, 13, 27, 31
Emotional symptoms, 6, 7
Eustress, 2, 18, 28, 30
Executive as a stressor, 9, 10, 30-31
Exercise advice, 19
aerobic, 19-23
benefits, 18
cool down, 20
establishing program, 19-21
fluids, 20
getting started, 19
indoor, 22
injury, 19, 20
warm up, 20
Experience, 12
Fatigue, 5, 7, 14
Fats, 14, 16, 17
Fight or flight response, 5, 18, 24
HDL cholesterol, 18, 34, 35
Headaches, 5, 7, 15, 24
Heart condition of, 32-35
disease, 9, 18, 20, 32, 34, 35
monitoring, 20-21
Hypertension, 6, 15
Job pressure, 8, 9, 26
Jogging, 21-22, 23
Joint pains, 5, 7
Jumping rope, 23
Interpersonal relations, 8, 9, 26
Locus of control, 11, 36
Meditation, 25
Meetings, 8, 29
Mental Imagery, 25
Needs, 11, 26, 32
Nutrients, 14, 15, 16
Nutrition eating tips, 15
habits, 14, 17
items to avoid, 14
proper diet, 16-17
Organizational climate, 8, 9, 26
Protein, 16
Relaxation before eating, 15
exercise and, 18, 25
mental, 25
physical, 24-25
Responsibility, 8, 9, 26
Role ambiguity, 8, 26
conflict, 8, 26
Rowing, 23
Salt (sodium), 6, 15
Self-awareness, 32
Stress behavioral signs, 6, 7
definition, 2
inducing, 9-10
performance/health, 4
personal characteristics, 11-12
physiological response to, 5, 7
psychological response to, 6, 7
Stressors interpersonal, 8
organizational, 8, 9
management of, 26-30

Sugar, 5, 14-15, 17, 20
Support team, 26-27
Swimming, 22
Time
 goals, 28
 management, 28-29
 planning, 28
 pressures, 8, 9, 26
 suspenses, 10, 28, 29, 30
 urgency, 11, 35, 36
 wasters, 29
Type A behavior, 11, 35-36
Ulcer, 6
Values, 11, 26, 32
Walking, 19, 21
Work overload, 8, 9, 26



7 - 86